

AMENDMENTS TO THE CLAIMS

Claims 1-43 (Cancelled)

Claim 44 (Previously Presented) A decoding method for decoding blocks of picture data included in a bit stream, said decoding method comprising:

obtaining, by a command obtainment unit and from the bit stream including the blocks of picture data, a sequence of commands for respectively assigning frame-indices, used for frame decoding, to reference frames of the blocks of picture data;

adaptively switching, by a processor and on a block-by-block basis of the blocks of picture data, between frame decoding and field decoding;

specifying, by a reference frame specification unit and in a case where frame decoding is performed on a block of picture data included in the bit stream, a reference frame, which is referred to when decoding the block of picture data, according to a reference index extracted from a coded block information area of the bit stream and according to a frame-index included in the assigned frame-indices;

specifying, by a reference field specification unit and in a case where field decoding is performed on the block of picture data included in the bit stream, a reference field, which is referred to when decoding the block of picture data, according to a reference index extracted from the coded block information area of the bit stream and according to a field-index, which is for field decoding the block of picture data and which is generated using a frame-index included in the assigned frame-indices;

obtaining, from the bit stream, information indicating a maximum number of frame-indices; and

determining a maximum number of field-indices to be double a value of the maximum number of frame-indices,

wherein said specifying of the reference field includes:

extracting the reference index from the coded block information area of the bit stream and from within a range of the determined maximum number of field-indices;

specifying, as the reference field, a field having a parity that is the same as a parity of a field including the block of picture data, out of two fields that make up the reference frame specified according to the frame-index, in a case where a value of the extracted reference index is double a value of the frame-index; and

specifying, as the reference field, a field having a parity that is different from the parity of the field including the block of picture data, out of the two fields that make up the reference frame specified according to the frame-index, in a case where the value of the extracted reference index is double the value of the frame-index, plus one.

Claims 45-47 (Cancelled)

Claim 48 (Previously Presented) A non-transitory computer-readable recording medium having a program recorded thereon, the program for decoding a coded block signal, and the program causing a computer to execute a decoding method comprising:

obtaining, by a command obtainment unit and from the bit stream including the blocks of picture data, a sequence of commands for respectively assigning frame-indices, used for frame decoding, to reference frames of the blocks of picture data;

adaptively switching, by a processor and on a block-by-block basis of the blocks of picture data, between frame decoding and field decoding;

specifying, by a reference frame specification unit and in a case where frame decoding is performed on a block of picture data included in the bit stream, a reference frame, which is referred to when decoding the block of picture data, according to a reference index extracted from a coded block information area of the bit stream and according to a frame-index included in the assigned frame-indices;

specifying, by a reference field specification unit and in a case where field decoding is performed on the block of picture data included in the bit stream, a reference field, which is referred to when decoding the block of picture data, according to a reference index extracted from the coded block information area of the bit stream and according to a field-index, which is for field decoding the block of picture data and which is generated using a frame-index included in the assigned frame-indices;

obtaining, from the bit stream, information indicating a maximum number of frame-indices; and

determining a maximum number of field-indices to be double a value of the maximum number of frame-indices,

wherein said specifying of the reference field includes:

extracting the reference index from the coded block information area of the bit stream and from within a range of the determined maximum number of field-indices;

specifying, as the reference field, a field having a parity that is the same as a parity of a field including the block of picture data, out of two fields that make up the reference

frame specified according to the frame-index, in a case where a value of the extracted reference index is double a value of the frame-index; and

specifying, as the reference field, a field having a parity that is different from the parity of the field including the block of picture data, out of the two fields that make up the reference frame specified according to the frame-index, in a case where the value of the extracted reference index is double the value of the frame-index, plus one.

Claim 49 (Cancelled)

Claim 50 (Previously Presented) A decoding apparatus for decoding blocks of picture data included in a bit stream while adaptively switching, on a block-by-block basis of the blocks of picture data, between frame decoding and field decoding, said decoding apparatus comprising:

a command obtainment unit operable to obtain, from the bit stream including the blocks of picture data, a sequence of commands for respectively assigning frame-indices, used for frame decoding, to reference frames of the blocks of picture data, and operable to obtain, from the bit stream, information indicating a maximum number of frame-indices; and

a reference frame/field specification unit operable to:

specify, in a case where frame decoding is performed on a block of picture data included in the bit stream, a reference frame, which is referred to when decoding the block of picture data, according to a reference index extracted from a coded block information area of the bit stream and according to a frame-index included in the assigned frame-indices; and

specify, in a case where field decoding is performed on the block of picture data included in the bit stream, a reference field, which is referred to when decoding the block of

picture data, according to a reference index extracted from the coded block information area of the bit stream and according to a field-index, which is for field decoding the block of picture data and which is generated using a frame-index included in the assigned frame-indices,

wherein said reference frame/field specification unit:

specifies the reference field by extracting the reference index from the coded block information area of the bit stream and from within a range of a determined maximum number of field-indices that is double a value of the maximum number of frame-indices;

specifies, as the reference field, a field having a parity that is the same as a parity of a field including the block of picture data, out of two fields that make up the reference frame specified according to the frame-index, in a case where a value of the extracted reference index is double a value of the frame-index; and

specifies, as the reference field, a field having a parity that is different from the parity of the field including the block of picture data, out of the two fields that make up the reference frame specified according to the frame-index, in a case where the value of the extracted reference index is double the value of the frame-index, plus one.

Claims 51-57 (Cancelled)